

Particle Post

May 2005

Satisfaction lies in the effort, not in the attainment. Full effort is full victory.

M. Gandhi

A Note From Our Chairman

Congratulations are in order for several persons in the department this month. Thomas Roser has received the IEEE 2005 Particle Accelerator Science and Technology Award. His citation reads: "For pioneering scientific work and introduction of new technology in the acceleration, storage and collision of polarized protons in the high energy collider RHIC. Four student scholars from the C-AD family have received BSA Directors' Scholarships. Kari D'Ottavio, Jason de Boer, Grace Liaw and Leila Makdisi as well as Alison Wu of the Superconducting Magnet Division have been recognized and compensated for their achievements. C-AD and SMD garnered 5 of the 15 scholarships. Congratulations to the recipients and the proud parents.

This past month has again been one of DOE and NSF reviews. At the annual HEP review we presented our case for R&D support for an AGS intensity upgrade for a future long baseline neutrino experiment aimed at a yet to be selected underground laboratory that is at least 2000 km away from BNL. We will be sending in a formal request to the DOE within a month. The NSF RSVP baseline review was also held. The AGS upgrades and experiment support scope, cost and schedule were deemed to be in excellent shape and ready to be brought forth to the NSF management and the National Science Board. The National Science Board is expected to act upon the recommendation of the NSF Assistant Director for Physical and Mathematical Sciences during its meeting in mid-August.

On the power cost front, the State of New York (NYPA) has concluded a contract with BNL to provide electrical energy at a reduced rate to BNL. The contract is to run for 3 years, starting July 1, at a cost of \$65 / MWH. This is up from our present rate of \$55 / MWH but substantially less than we pay at home at ~\$140 / MWH. Thank you Governor.

The RHIC polarized proton run has been going extremely well. Higher luminosity and polarization than last year are now the norm. The AGS cold snake is undergoing commissioning in the AGS ring.

The NSRL-5 run was just completed and in early June NSRL-6 will start. This will include some hands-on-experiments for the students who are attending the radiobiology summer school classes.

Derek Lowenstein

Administration

RHIC Operations cost for March was \$10.1M. Current cost projections continue to forecast a budget shortfall so it is critical that we identify and appropriately prioritize the remaining procurements for this fiscal year. Brian Boyle and Wolfram Fischer will be contacting various group leaders in early June for estimates of materials needed to support planned shutdown activities.

Significant progress has been made in the planning for EBIS construction. A request to the Nuclear Physics Program Office to begin recording costs associated with the EBIS Total Project Cost (TPC) is pending. FY 2005 cost for the Conceptual Design Report (CDR) and Research and Development (R&D) are estimated at \$200K and \$500K, respectively. \$2M in DOE funding and \$1.5M of NASA funding is planned in FY 2006.

SNS WBS 1.5 Ring Systems is all but complete. It is anticipated that the final shipments of ring equipment to ORNL will be completed during May. Effort on WBS 1.9 Control Systems is planned through September 30.

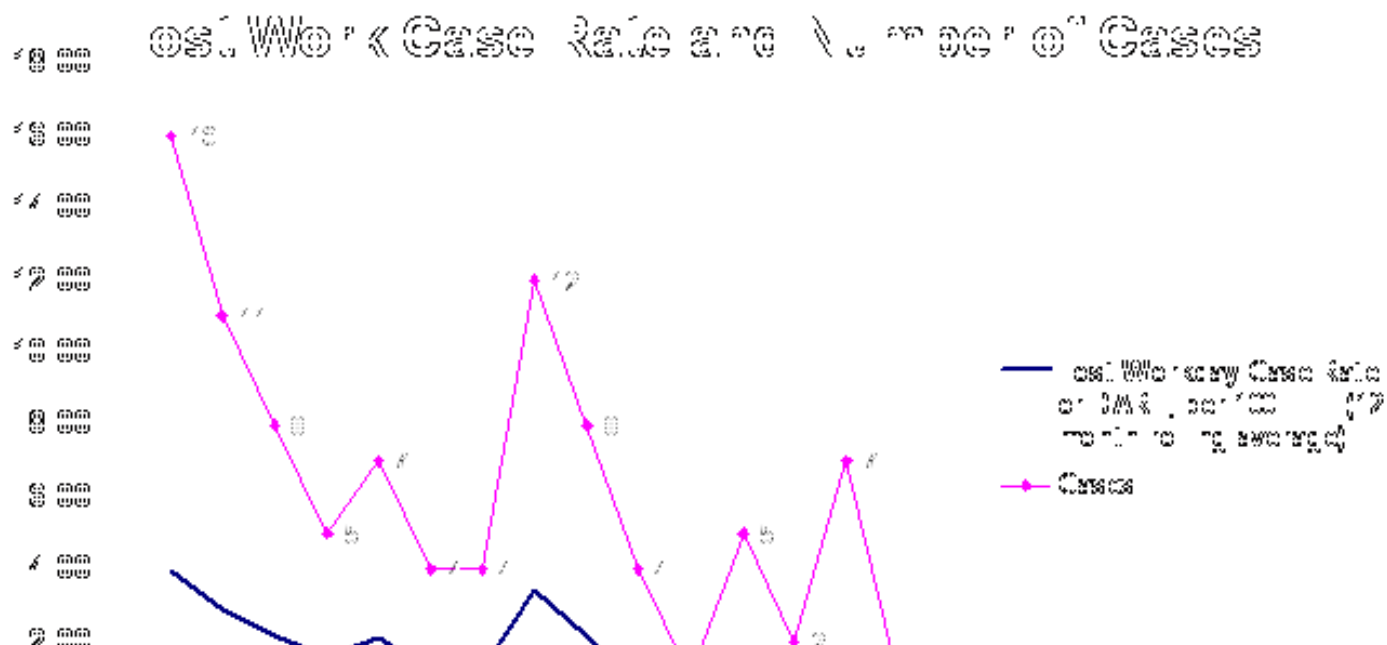
To assist personnel working on various construction projects within the department, including both RSVP and EBIS, arrangements have been made for an on-site Microsoft Project training program. The program, offered by Learning Tree International, is scheduled for Wednesday, June 15th through Friday, June 17th. To date, 19 attendees from C-AD, Physics and the DOE BHO have confirmed their plans to participate. For further information, please contact Kerry Mirabella on extension 2632.

A blanket order for electronics parts will soon be in place and should not only expedite the procurement process but will also enable us to take advantage of the preferred overhead rate assessed on contracts that exceed \$25,000. The initial contract value of \$75,000 will save \$23,400 in overheads. Once available for use, Ann Lamberti will distribute a procedure on how to utilize the electronics blanket order.

The implementation of PeopleSoft Electronic Time Reporting for the Collider-Accelerator Department has been moved up by one month and will now begin in July. The Business Systems Division will offer training in the Snyder Seminar Room on Wednesday, June 15 and Monday, June 27.

Stephanie LaMontagne-McKeon

!!Safety Stats!!



REMINDER: TLD exchange is done the FIRST FRIDAY of the Month.

NEXT EXCHANGE: Have your TLD on its assigned badge board by
Friday, JUNE 3, 2005

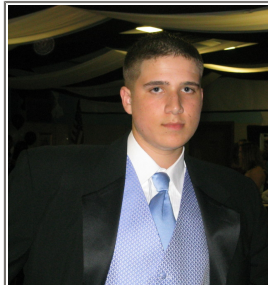
Pete Cirnigliaro

BSA Scholars, 2005

Kari D'Ottavio, daughter of Ted, Controls Division, attends Miller Place High School. She is undecided on a major, but she plans to attend Loyola College, Maryland.



Jason de Boer, son of John, Water Systems and Gloria (NNS), attends Mercy High School in Riverhead. He will major in business at Bryant University.



Grace Liaw, daughter of Chong-Jer, Mechanical Systems, attends Ward Melville High School. She will major in engineering at Carnegie Mellon University or Case Western Reserve University.



Leila Makdisi, daughter of Yousef, Physics Support, attends Earl L. Vandermeulen High School. At Bard College, she will major in physics with a minor in art history or English literature.

INSERT PICTURE OF LEILA

Alison Wu, daughter of Kuo-Chen (SMD), attends Ward Melville High School. She will study biology or business at the University of California, Los Angeles, or Boston University.



Congratulations!

Arrivals

Edward Bajon

Ed is starting his position as Co-Op Engineer on or about May 23. He will be working with Omar Gould in the Preinjector Systems Group.

Isao Yamane

Isao is a Physicist working with Deepak Raparia in Bldg. 930.

Welcome!

Departures

Robert Marascia

Bob is with the Design & Documentation Group and will be retiring July 29.

Alexander Nass

Alex is a Research Associate in the Physics Support Group of the ES&F Division. He will be leaving the May 20.

We Wish You the Best!

Did You Know:

Thomas Roser Wins 2005 Particle Accelerator Science and Technology Award. Roser's citation reads: "For pioneering scientific work and introduction of new technology in the acceleration, storage and collision of polarized protons in the high energy collider RHIC."

Notice of Controlled-Area Postings During RHIC Operations - REMINDER

The Relativistic Heavy Ion Collider (RHIC) is expected to continue operations through the end of June 2005. During this operating period, the entire RHIC site, including the inner road, is posted as a Controlled Area, with the exception of Building 1005 (the Collider Center), the adjacent parking lot, and the approach road to Building 1005. In addition, the northern portion of Thomson Road is posted as a Controlled Area and closed to routine traffic.

The following requirements must be satisfied before entering the posted Controlled Areas. Failure to comply with these requirements could lead to a Reportable Occurrence and a Price Anderson Amendment Act (PAAA) violation:

1. Unescorted Access requires up-to-date General Employee Radiation Training (GERT) or Radworker Training (RW-1) and facility-specific training. Runners, bike riders, and walkers just need GERT or RW-1, but cannot enter any buildings in the posted areas.

- Experimenters: contact the RHIC & AGS Users' Center, Ext. 5975, for assistance.

- BNL Employees: contact Ann-Marie Luhrs, Ext. 7007, for assistance.

2. Escorted Access may be granted by contacting Ann-Marie Luhrs, Ext. 7007. Escorts must complete a Training Waiver Form, and the escorted entry must be approved by the Collider-Accelerator Department. Call at least one day prior to the escorted access. As always, all personnel are expected to adhere to the posted requirement.

Loralie, Vacuum Group, gave birth to **Alina**
Christie Chu April 17 at 7:44am. Both Loralie and Alina
are doing very well, as is **Dad**. Alina weighs 7lb 2oz and
she is 20 inches long.

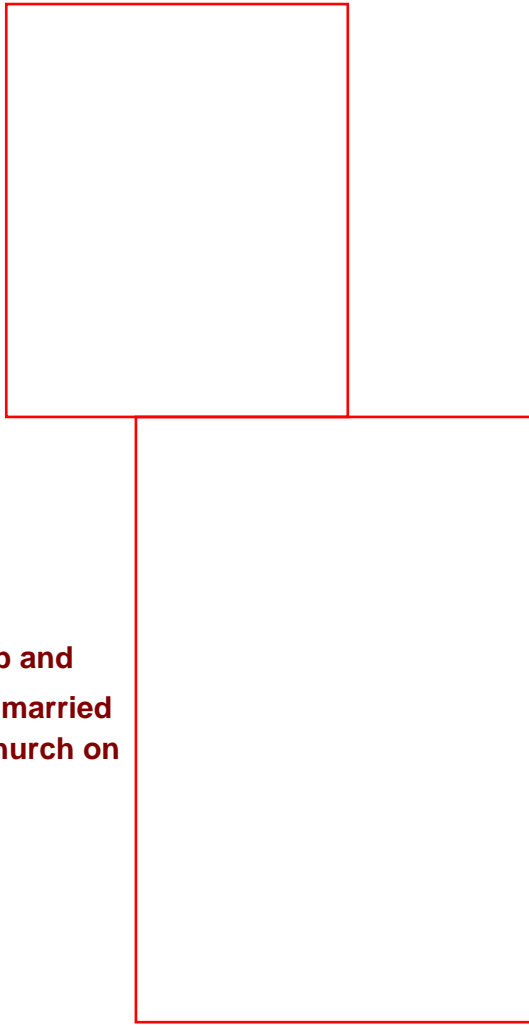




Devin Joseph Larsen



Phil Pile's daughter **Annelisa** gave birth to **Devin** Joseph on Mother's Day, May 8 weighing in at 6 lbs, 7oz and 19 inches long. This is Phil's second grandchild.



Bob Duffin from the Design Group and
Sue Norton (Physics Dept) were married
in the Cutchogue United Methodist Church on
Sunday, April 17th.

Congratulations to ALL

*We wish all of you born in **MAY**
a happy and healthy year ahead.*

Birthday people ONLY click on cake



C-AD Service Awards

for April

35 Kenneth Wokosky

Ken is with the Collider-Accelerator Support Group and received a mantel clock.

30 Joel Scott

Joel is in the ESHQ Division working in the Environmental Protection Group and received a radio/travel alarm and a quill pen.

25 Pamela Manning

Pamela works for the Experimental and Support and Facilities Division and received a Bulova watch.

20 Thomas Tallerico
Lynanne DiFilippo

Thomas is with the Control and Instrumentation Group within the Cryogenic Systems and Lynanne works in the ESHQ Division and both received cross gold pen & pencil sets.

10 Joseph Saetta
George Meade
Gary Miglione

Joe is with the Instrumentation and Beam Components Group, George with Cryogenic Systems and Gary with the Design and Documentation Group. All received a mug, coaster, and key tag.

Congratulations!

Are you a good judge of character?

Try This Out!

By looking at a picture of a person, you have to decide if:

He is a Program Language Inventor or a Serial Killer.

Go with your gut feeling - believe it or not...

<http://www.malevole.com/mv/misc/killerquiz/>

Interesting Facts: from the May issue of www.island-metro.com

Long Island's Story

Geography

Native Americans called it "Paumonock" meaning "land of tribute" because of its fish-like shape. The Colonizing Dutch christened it "Lange Eilandt," and British Settlers later anglicized the name to "Long Island." Indeed, the region lives up to both names: it is fish-shaped with its mouth at Jamaica Bay and its tail forming two peninsulas stretching to Orient and Montauk Points; it is also the largest island adjoining the continental United States, extending 118 miles east-northeast from the mouth of the Hudson River. Twenty miles at its widest point, the 1,377 square-mile island is separated from the mainland on the north by the Long Island Sound and surrounded by the Atlantic Ocean on the south and east.

The shape and topography of Long Island was sculptured by the last glacial advances about 45,000 years ago. As the earth warmed, these ice masses melted leaving two major east-west deposits, one along what are now the rocky cliffs of the North Shore, and the other forming the hilly region across the island's center.

Geographically, Long Island includes the four counties of Kings (also known as Brooklyn), Queens, Nassau and Suffolk. But because Brooklyn and Queens are part of the five-county City of New York, the Long Island reference is commonly used to mean Nassau and Suffolk counties exclusively. Long Island (Nassau and Suffolk) measures approximately 100 miles from the Nassau-Queens border to Montauk Point, including 56 miles from the Queens border to Riverhead. From Riverhead, two peninsulas extend eastward separated by the waters of Great Peconic Bay and Gardiner's Bay. The northern peninsula, the "North Fork," ends at Orient Point and is 28 miles in length. The southern peninsula, the "South Fork," ends at Montauk Point and is 44 miles long. Nestled in the bays between the two forks are two small islands: Shelter Island and privately-owned Gardiner's Island. Nassau-Suffolk's land area is 1,198 square miles (287 square miles in Nassau

and 911 square miles in Suffolk) and has a linear shoreline of approximately 1,180 miles.

History

Italian explorer Verrazano first sighted Long Island in 1524; Henry Hudson landed on western Long Island in 1609; and five years later, Adrian Block, a Dutch trader-explorer, was the first to touch the east end when he went ashore at Montauk and met local Indians.

Thirteen Indian tribes once occupied Long Island; three in Nassau, eight in Suffolk, and two in the area of what is now the county border. The names of many of today's communities and landmarks reflect those early peoples. They include: Massapequa, Shinnecock,



Teddy Roosevelt made Sagamore Hill his "Summer White House."

Montauk, Wyandanch, Manhasset, Setauket, Matinecock, Nissequogue, and Ronkonkoma. Today, there are two existing Indian reservations on Long Island: Poospatuck and Shinnecock, both in Suffolk County.

In 1664, the British fleet conquered New Amsterdam from the Dutch and established the Colony of New York. The colonial period, 1660-1775, was a time of great growth for Long Island. Rolling meadows and woodlands gave way to farms and villages; rough log shelters were made into comfortable homes; and churches, roads, grist mills and shipyards were built.

Long Island was a major player in the Revolutionary War. The Island was sharply

divided in 1776 regarding independence from the Crown of England.

The disastrous defeat of the Americans at the Battle of Long Island in 1776 exposed the patriots in Suffolk County to seven years of suffering under the occupation of British, Hessian and Tory troops, supported by the British Navy.

Without patriot troops for protection, Long Islanders resisted—individually and in small bands—with ingenuity and daring. Islanders spied, burned stores, engaged in illicit trade, helped whale boat raiders from New England, and harassed the occupation troops. But not without heavy sacrifices in farms and property destroyed, families broken and lives lost.

Peace was finally negotiated and the occupation troops—British and Hessian—departed in 1783. Suffolk County was a devastated land, but the returning exiles and patriot soldiers went to work restoring homes, farms and shipping.

During the early 19th century, two maritime industries, whaling and fishing, became integral to Long Island's economy. And, as a natural outgrowth, Long Island became a major center of shipbuilding during the first half of the century. By the late-1800s, the railroad had established an elaborate system of tracks throughout the island, signaling marked change in Long Island's landscape.

In the coming decades, it would become an interdependent, industrial economy—an incubator for emerging technologies, sowing seeds of change.

Dramatic Growth

From the 1900s through the 1950s, Long Island experienced steady, and sometimes spectacular, growth in both population and economic development. Long Island began the twentieth century as a mostly rural farming area, with a population in 1900 of 133,030. However, during the next thirty years, suburban communities began to grow up mostly in the western half of Nassau County, and especially along the various branches of the Long Island Rail Road.

During the Second World War, Long Island became a busy center of industrial activity, with factories producing numerous aircraft and specialized guidance equipment for planes, ships and weapon systems used in the war effort. Mitchel Field in Nassau County became one of the most important facilities for the transportation of troops and supplies to the war zones.

Part of the reason for Long Island's involvement with aviation during the Second World War stems from the fact that this area was the

scene of pioneering efforts in flight and in aircraft manufacture for three previous decades. Long Islanders refer to their region as the "Cradle of Aviation."

After the war ended in 1945, the needs and demands of the population re-emerged, especially the need for housing. Nassau County, with its proximity to New York City and its then existing abundance of vacant land, was to become a prime location for new housing construction and population growth. Beginning in 1945 and continuing through the 1950s, numerous new housing units and large-scale housing developments, such as Levittown, were built and occupied by thousands of new residents each year.

Economic Development

Commerce and industry on Long Island has also developed in a dynamic manner during the five decades since the end of World War II. Many new shopping malls, department stores, supermarkets and smaller shops have settled and prospered at various locations throughout the bi-county area.

Many new office buildings have also been constructed in the region during recent years and thousands of persons from the area's highly skilled workforce (75% high school graduates and 20% college graduates) have found employment in those buildings.

Industry has generally been prosperous and innovative. The manufacture of computer software, electronic equipment, biotechnology, medical and healthcare systems, pharmaceuticals, office supplies, printing and graphics are among the major industries employing thousands of workers. Thousands more are employed in various service industries, such as utilities, government, transportation, home repair, offices, automobiles and a varied food service industry.

Long Island's workforce now exceeds 1.2 million persons and the region boasts one of the lowest unemployment rates in the nation. The area has grown to about one million local jobs with the remainder of the workforce commuting to New York City. Long Island can also boast being one of the wealthiest areas in the nation. For many years, Long Island's per household median effective buying income has ranked in the top five among the nation's 323 metropolitan markets according to *Sales and Marketing Management Magazine's* annual Survey of Buying Power.

About LONG ISLAND

A Matter of Fact...

Our People:

- Long Island's population of 2,798,235 is greater than the population of 19 states and if Long Island were a city it would rank as 4th largest in the nation. The Town of Hempstead with 759,535 residents is the nation's largest township.
- More than 1.4 million Long Island residents are employed with about 1 million working in Nassau-Suffolk and the remainder in New York City, according to the New York State Department of Labor. Long Island's unemployment rate averaged 4.2% in June 2004 vs. 7.4% in New York City, 5.9% in N.Y. State and 5.8% nationally.
- Long Island has 20 colleges and universities with more than 150,000 students and 128 public school districts with over 415,000 students.
- About 4 out of 5 L.I. high school graduates enter post secondary schools.
- Over 2 million motor vehicles are registered on Nassau-Suffolk roads and over 110,000 motorboats are registered in Nassau-Suffolk waters.



Peconic Bay offers beautiful views from both the North Fork and South Fork.

About Our History:

- Mastic was the home of William Floyd, one of the signers of the Declaration of Independence.
- Charles Lindbergh took off from Roosevelt Field in Nassau County in 1927 in his historic non-stop flight to Paris. The first U.S.

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airmail flight originated in 1911 from Garden City to Mineola.

- Babylon was the site of the first radio transmission by wireless inventor Guglielmo Marconi in 1901 from Fire Island Avenue.
- America's first supermarket, King Kullen, started on Long Island in 1930.
- The nation's first suburbia was started on Long Island in 1947 with the building of 17,400 free-standing homes called Levittown.
- Walt Whitman, considered the greatest American poet, was born in West Hills, Huntington, in 1819.
- Long Island was the site of the nation's first concrete non-stop exclusive automotive road, the Vanderbilt LI Motor Parkway, from the Queens border to Lake Ronkonkoma, built in 1908, and the forerunner of the modern day superhighway.
- Deep Hollow Ranch in Montauk is the site of the oldest cattle ranch in America, built in 1658, and is recognized as the birthplace of the American cowboy.
- Montauk Point was the spot where Colonel Theodore Roosevelt and his Rough Riders returned after the Spanish American War.

- The Lunar Module which landed men on the moon in 1969, was built on Long Island by the Grumman Corporation.
- New Suffolk on Long Island's north fork was the site of the first U.S. Naval Submarine Base when, in 1900, inventor John Holland conducted tests and sea trials on the Navy's first submarine, Holland SS-1, with four more later deployed.

About Our Agriculture:

- Suffolk County is the leading agricultural county in New York State based on the wholesale value of its farm products. Over 32,000 acres are farmed on Long Island producing over 25 types of crops. Over 50 million lbs. of fish are landed annually by commercial fishermen, and shellfish are farmed on over 16,000 underwater acres. Several million ducks are produced annually on Long Island and over half of the nursery plants and flowers grown in N.Y. State are

produced on Long Island in 9.5 million sq. ft. of indoor greenhouses.

- New and rapidly expanding agricultural industries on Long Island include thoroughbred horse breeding and training, where it is said that Long Island has more horses per capita than Texas – exceeding 30,000 in total. Grape growing and wine making are other Long Island growth industries where the east end, say most viticulture experts, possesses a microclimate nearly perfect for raising fine vinifera species of grapes – including Chardonnay, Riesling, Sauvignon Blanc, Cabernet Sauvignon, Pinot Noir, from which fine wines are produced. With more than 3,000 acres planted, Long Island's 50 vineyards and 28 wineries can now produce three million bottles of wine each year.

About Our Economy:

- In March 2004, *Inc. Magazine* ranked the Nassau-Suffolk region 16th in their list of The Top Cities in America for Doing Business.
- The total annual gross receipts and sales of the Nassau-Suffolk region exceeds \$162 billion, which is greater than the gross national product of many foreign countries.
- Long Island's economy is made up of about 96,304 businesses including 17,355 retailers; 3,879 manufacturers; 2,437 agricultural; 9,495 in construction; 3,159 in transportation; 8,027 wholesalers; 8,050 in finance, insurance and real estate; 34,785 service related firms; and 3,347 miscellaneous types of firms. Of the 96,304 firms, 1,341 firms have 100 or more employees, 43 have 1,000 or more employees, 32 employ 2,000 or more, and 11 employ over 4,000 employees. More than 1,000 Long Island firms are engaged in hi-tech related fields.
- The Long Island region (Nassau-Suffolk Counties) is the nation's 5th wealthiest area with a per household median effective buying income (after taxes) of \$54,492. This, com-



Long Island is known for its beautiful beaches.

pared to 323 identified metropolitan areas across the country and a U.S. median of \$33,035 according to *Sales and Marketing Management Magazine's* 2003 Survey of Buying Power. The study also found that the Long Island region ranked 16th in population, 21st in total households and 14th in retail sales.

- Long Island has 80% homeowner households, and 53% (about 465,000) of Long Island households have a spendable income of \$50,000 or more. In addition, 46,900 (5%) of LI households earn over \$150,000 annually.
- Since 1983 exports from Long Island to international markets increased from \$1.4 billion to about \$4.7 billion annually.
- There are more than 1,200 shopping centers on Long Island totaling 60 million square feet including 13,000 stores and nine indoor regional malls.
- The median sale price of a house on Long Island during the third quarter of 2003 was \$374,400, up 14.8% from the same period in 2002 and up significantly from \$63,000 way back in 1980. There are over 930,000 households in the bi-county area.
- Long Island currently has more than 50 million square feet of office space in over 800 office buildings and over 100 million square feet of industrial space in over 200 industrial parks and areas.

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ALUMNI NEWS: AGS/RHIC/C-AD RETIRED CROWD -We'd enjoy hearing from you and what you're up to! Send your notes to pmanning@bnl.gov

Retiree Update:

email received from Dick Witkover

From: Richard Witkover [richwit@optonline.net]
Sent: Tuesday, April 26, 2005 12:49 PM
To: Manning, Pamela
Subject: retiree news
Hi Pam

Its been a while...hope you and the gang have all been well. This past October Carole and I went on a tour to Peru and the Galapagos Islands run by Overseas Adventure Travel. We spent quite a bit of time in the ancient Incan city of Cuzco, located 11-12,000 feet above sea level. I had a little trouble with the altitude (mild headache) but enjoyed it very much. We found Peru, especially the Sacred Valley area around Cuzco, fascinating, with many photo ops of the people and surroundings.



yuncaypata school-2 kids outside_sm_1848.jpg



sm Cuzco-woman climbing stairs_CRW_1657.
jpg

From there it was on to Machu Picchu, a so-called "Lost City" only rediscovered in the early 1900's.



CWRW on top of MP_sm_1816.jpg



RW MP 4_sm_1760.jpg

We then went on to Quito, Ecuador and finally the Galapagos Islands, which were the inspiration for Darwin. We were able to get lots of great pictures of the animals who are not afraid since they have few natural enemies.

Baby booby_sm_2061.jpg

Darwin-land turtle and CW_sm_2160.jpg

Frigate bird all puffed up_2318_sm.jpg

sally lightfoot on lava 2_sm_2233.jpg

We spent 7 days on the boat visiting 9 of the 40 islands.

Carole and I took several thousand pictures (all digital) and hope to have a slide show some day soon.

Regards to all,

Dick Witkover

You can catch up on all of Eric Forsyth's travels by clicking on his sailing yacht below



<div><div></div><div>MAY 2005</div></div>						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
					AP Seminar "Global Decoupling on the RHIC Ramp", Y. Luo, BNL, 4pm, LCR, Bldg. 911B	Martial Arts Expo 6:30pm- 9pm Berkner Hall
8	9	10	11	12	13	14
		Sam's Club, 10am- 2pm Berkner	A Celebration of Richard Feynman: Book Readings and Drumming at Brookhaven Lab 4pm Berkner Hall		AP Seminar "Analysis of the RHIC desorption experiments", E. Mustafin, GSI, 4pm, LCR, Bldg. 911B Joe Hampton & the Kinpins in Concert; Singer-	

					Songwriter Caitlyn Amanda to Open Show 8pm Berkner Hall	
15	16 TIMECARDS DUE AP Seminar "Accelerator Physics in the Resonance EDM Storage Ring", Y. Orlov, Cornell U., 4pm, Snyder Seminar Room, Bldg. 911A	17	18 BSA Recital Series: Vocalist Ishan Johnson Noon, Berkner Hall	19	20	21
22	23	24	25	26	27	28 Estee Lauder Factory sale - Passes available at BERA Store
29	30 <div></div> HOLIDAY	31				



June 2005

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

			1	2	3	4
5	6	7	8 Costco, 10am-2pm, Berkner	9	10	11
12	13	14	15 RHIC Retreat	16 RHIC Retreat TIMECARDS DUE	17 RHIC Retreat	18
19	20 RHIC & AGS Annual User's Meeting	21 RHIC & AGS Annual User's Meeting	22 RHIC & AGS Annual User's Meeting	23 RHIC & AGS Annual User's Meeting	24 RHIC & AGS Annual User's Meeting	25
26	27	28	29	30		



Editor: [Pamela Manning](#) x4072

We Remember
Sept. 11, 2001